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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/548,026 | 04/12/2000 | Steen M. Matzen | 196-1203 | 5394 |

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| EXAMINER |
|---|
| DICKENS, CHARLENE |

| ART UNIT | PAPER NUMBER |
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| 2855 | |

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. 09/548,026 | Applicant(s) MATZEN, STEEN M. | |
|---|---|---|---|
| | Examiner Ex. Dickens | Art Unit 2855 | |

--Th MAILING DATE of this communication appears on th cov r sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *06 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disp sition of Claims**

4)☒ Claim(s) *18-31 and 33-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-31 and 33-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *11* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 18-31 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaertner (US Pat 4,784,000) in view of Shauger et al. In regards to claims 18, 28, 30, Gaertner teaches an electromagnetic flowmeter arrangement having a measuring tube 13, a coil arrangement 17 for generating a magnetic field substantially perpendicular to the direction of flow through the measuring tube (col. 4, lines 10-16, an electrode arrangement 21 substantially perpendicular to the direction of flow and to the magnetic field (col. 4, lines 16-18), a supply system 19 for the coil arrangement which has a current direction change-over arrangement 25, determining after a change-over of the current direction, at least one parameter of the rise in the current in the coil arrangement and compares the parameter with a given value determined before the change over of the current direction. However, Gaertner does not specifically disclose a comparator as a testing device. Shauger et al. disclose a comparator as a testing device 40 for the purpose of providing an electromagnetic flowmeter which is capable of accurately measuring the flow rate

of fluid independently of changes in fluid conductivity, viscosity and density (col. 3, lines 65-68). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a comparator as a testing device in Gaertner as taught by Shauger et al. for the purpose of providing an electromagnetic flowmeter which is capable of accurately measuring the flow rate of fluid independently of changes in fluid conductivity, viscosity and density (col. 3, lines 65-68).

Claim 19: Gaertner teaches testing is carried out during measurement of a throughflow (col. 1, lines 9-14);

Claim 20: Gaertner teaches the reference value is determined from the flowmeter at an earlier time (col. 4, lines 12-14);

Claims 21, 22: Gaertner teaches a time period that elapse between two predetermined current values is used as a parameter (col. 7, lines 33-40);

Claim 23: Gaertner teaches a stepped-up voltage (col. 4, lines 26-34);

Claim 24: Gaertner teaches in which the supply voltage of the coil arrangement is regulated radiometrically in relation to a reference voltage which is also used to determine the parameter (col. 8, lines 5-15);

Claim 25-27: Gaertner teaches in which the curve shape is formed by current rise is used as the parameter (fig. 4);

Claim 29: Gaertner teaches a time-counter 61;

Claim 31: Gaertner teaches a checking unit which checks to see if the time ascertained differs by more than a predetermined difference from a given value (col. 7, lines 1-5 and col. 9, lines 3-45);

Claim 33: Gaertner teaches a temperature-dependent resistor (Fig. 1);

Claim 34: Gaertner teaches a supplementary voltage supply system (Fig. 2);

Claim 35: Gaertner teaches an analogue-to-digital converter (Fig.3).

3. Applicant's arguments filed 1/6/03 have been fully considered but they are not persuasive. Applicant argues Gaertner and Shauger et al. do not deal with testing. Specifically, applicant argues Gaertner does not teach a testing device which is a comparator and Shauger et al. does not deal with testing. The Examiner agrees Gaertner does not teach a comparator, but nevertheless Shauger et al. does teach a comparator. To the assertion of Shauger et al. not dealing with testing, the applicant's attention is drawn to several facts. One Shauger et al. is classified in class 73, which is entitled "Testing and Measuring". Second, the title, "Bi-Directional Electromagnetic Flowmeter" is suggestive of testing, i.e., a flowmeter is a testing device. Lastly, the abstract of Shauger et al. discloses "An electromagnetic flowmeter capable of

accurately measuring the flow rate of fluid....Associated with the feedback loop is a bi-directional auxiliary which detects the polarity of the d-c signal and acts to apply the sampled duty cycle...." Measuring is defined as, a reference sample or standard used for the quantitative comparison of properties. Testing is defined as to ascertain the presence or properties of a substance. Hence, according to the conventional definitions of measuring and testing, Shauger et al. not only clearly measure a value, the reference also test the measured value. Therefore, the purported argument made by the applicant is not persuasive. Accordingly, the modified Gaertner teaches and suggests the claimed invention. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this or earlier communications from the examiner should be directed to Examiner Dickens or the supervisor, Edward Lefkowitz, whose telephone numbers are (703) 305-7047 or 305-4816, respectively. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center's receptionist whose telephone number is (703) 308-1782. The fax numbers for the Center are (703) 305-3431 and (703) 305-3432.

EDWARD LEFKOWITZ
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cd/dickens
June 26, 2003